

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 1996		3. REPORT TYPE AND DATES COVERED
4. TITLE AND SUBTITLE Postpartum Concerns And Needs Of Multiparas			5. FUNDING NUMBERS	
6. AUTHOR(S) Janet L. Egan				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) AFIT Student Attending: University of Colorado			8. PERFORMING ORGANIZATION REPORT NUMBER 96-032	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) DEPARTMENT OF THE AIR FORCE AFIT/CI 2950 P STEET, BLDG 125 WRIGHT-PATTERSON AFB OH 45433-7765			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES			19960809 125	
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release IAW 190-1 Distribution Unlimited BRIAN D. GAUTHIER, MSgt, USAF Chief Administration				
12b. DISTRIBUTION CODE				
13. ABSTRACT (Maximum 200 words)				
14. SUBJECT TERMS			15. NUMBER OF PAGES 69	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT		18. SECURITY CLASSIFICATION OF THIS PAGE		19. SECURITY CLASSIFICATION OF ABSTRACT
				20. LIMITATION OF ABSTRACT

GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to *stay within the lines* to meet *optical scanning requirements*.

Block 1. Agency Use Only (Leave blank).

Block 2. Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C - Contract	PR - Project
G - Grant	TA - Task
PE - Program Element	WU - Work Unit Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Report Number. (If known)

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of...; To be published in.... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. Distribution/Availability Statement. Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITAR).

DOD - See DoDD 5230.24, "Distribution Statements on Technical Documents."

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

Block 12b. Distribution Code.

DOD - Leave blank.

DOE - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports.

NASA - Leave blank.

NTIS - Leave blank.

Block 13. Abstract. Include a brief (*Maximum 200 words*) factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code (*NTIS only*).

Blocks 17. - 19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

Running head: POSTPARTUM CONCERNS AND NEEDS OF MULTIPARAS

Postpartum Concerns and Needs of Multiparas in
the First Three Weeks After Birth

Janet L. Egan

University of Colorado

Abstract

The postpartum period is a time of major transition in the life of a family; traditionally families have minimal access to health care providers during this crucial period. Few studies appear in the postpartum literature about the concerns and needs of multiparas as a separate group of childbearing women. The purpose of this pilot study was to determine the postpartum concerns and needs of multiparas in the first three weeks after birth. A telephone questionnaire was administered to a convenience sample of eight women five to seven days after birth and again at eighteen to twenty days after birth. Survey questions asked about the womens' lived experience, level of postpartum support, specific concerns, postpartum education in the hospital, and sibling reactions. Findings of this pilot study indicated that these healthy women experienced numerous physical and emotional concerns related to changing roles and anxieties about the infant. Limitations of the pilot study as well as implications for nursing practice and education are described.

Postpartum Concerns and Needs of Multiparas
in the First Three Weeks After Birth

Introduction

The postpartum nursing literature traditionally recognizes the time after childbirth as one of adaptation and adjustment (Mercer & Ferketich, 1990; Ruchala & Halstead, 1994). Some authors (LeMasters & Dyer as cited by Gruis, 1977) have referred to the birth of a first child as a time of crisis in the life of a family. Abriola (1990) described the postpartum period as a crucial time in the family life cycle and concluded that new mothers are especially vulnerable during this period of transition. In summary, the postpartum period is acknowledged as a major transitional state in a family's existence. Health professionals need to be sensitive to the adjustments inherent in this period; a family's stressors and coping style influence its viability and future health.

Problem Statement

Although there is a recognition in the postpartum literature that primiparas and multiparas have different needs and concerns in the postpartum period, few studies detail the postpartum needs and concerns of multiparas as a group with special needs and concerns. This pilot study explores the postpartum needs and concerns during the first three weeks after childbirth in a group of multiparas comprised of both active duty service women and spouses of active duty service members. The researcher investigated whether the population of women delivering in a military environment display different needs and concerns from the civilian population. The author theorized that unique military factors such as deployments and temporary duty assignments and increased family isolation from their home of origin could influence the postpartum period. The postpartum woman experiences numerous physical and emotional adaptations at a time when she currently has minimal contact with health care providers. Factors influencing a woman's postpartum

experience include such events as early discharge after childbirth, an anticipated return to full or part time employment, the infant's temperament and changes in a woman's family structure and dynamics.

Purpose and Significance of the Study

The purpose of this study is to explore the postpartum concerns and needs of low-risk multiparas in the first three weeks after childbirth. The author could not find any information detailing the postpartum needs and concerns of a group of subjects composed of military beneficiaries and active duty service women. An additional question concerned the impact of a shortened length of stay after childbirth on the coping abilities of mothers. Identified topics for exploration included the mothers' particular concerns and needs, the postpartum experience as lived by the mother, effects of the birth on family members especially the older child, the influence of postpartum teaching on adjustment issues, the mothers' support system in the first three weeks after childbirth, the mothers' efforts in facilitating sibling adjustment and her experience of early discharge after childbirth. The research question for this study is: What are the postpartum concerns and needs of multiparas during the first three weeks after delivery of a second or subsequent child?

This study has significance for nursing because few studies address the unique postpartum concerns and needs of multiparas as a distinct group. The author hypothesized that medical professionals are not typically aware of family adjustments and possible crisis situations because of the minimal interaction occurring with the postpartum family in the early weeks after childbirth. The prevailing early discharge trend mandates an examination of this and other practice issues for effectiveness and timeliness. Results obtained may be linked to discharge planning and the provision of support services for a group of women who may need more service than the current environment provides. By recognizing the concerns and needs of this group of women, services can be targeted to specifically address these issues for a vulnerable group of women in our care.

Definition of Terms

Multipara: Woman who has completed two or more pregnancies to viability, whether they ended in live infants or stillbirths.

Postpartum: Time period happening or occurring after birth.

Concern: A matter that engages a person's attention, interest, or care, or that affects her welfare or happiness. Other definitions include to trouble, worry or disquiet, and anxiety about some matter.

Need: A lack of something wanted or deemed necessary.

Background Information

The postpartum literature included a number of articles describing the postpartum period as a time when there is a gap in the health care provided to a woman and her family. Another issue which has implications for the health and welfare of the postpartum woman and her family is the current trend in early discharge after childbirth. The minimal contact with health care providers in the postpartum period combined with early discharge practices raises some issues regarding appropriate care in the postpartum period.

A Gap in the Health Care Delivery System

A family's structure and relationships shift with the birth and incorporation of an infant. Although a family may have acute needs for support and guidance in the early weeks postpartum, our current health care model minimizes contact with health care professionals during this crucial time in the life of a family. Reva Rubin (as cited by Mercer, 1979) was one of the first writers to identify what she called a gap in our care system for postpartum mothers. Rubin characterized the postnatal period as the most neglected aspect of modern maternity care. According to Rubin, this gap in care occurred because citizens in this country had a prevailing opinion that a woman had a baby, took it home and then everyone in her family lived happily ever after. This rosy view of childbirth influenced the amount of attention provided to mothers after childbirth as well as the

length of postpartum stays. At the time Rubin wrote about her postpartum concerns, the average length of stay after childbirth was three to four days for most women.

Numerous authors have also referred to this gap in our services to the postpartum mother (Gruis, 1977; Gardner & Campbell, 1991; Hiser, 1991; Gennaro, 1995). Ruchala and Halstead (1994) concluded "the post discharge experience of contemporary low-risk puerperal women is an area of health care that needs improvement" (p. 88). The author wondered if the gap in care is more striking today in this era of what some people call "drive through childbirth" and shortened postpartum stays ranging from 8-36 hours. Hiser (1991) found that shortened postpartum hospitalization had greatly reduced the time available to teach child care and parenting techniques to new mothers. In addition, she noted that the current health care system provided little support during the postpartum period when low-risk families most needed basic health maintenance information.

Effects of Early Discharge on Postpartum Adjustment

The definition of early discharge varies among institutions with some defining early discharge as eight to ten hours after childbirth and others defining early discharge as twenty-four hours after childbirth. A robust group of postpartum studies confirmed the author's assumption that early discharge after childbirth may influence the course of a mother's postpartum period. Hiser (1991) concluded that although early discharge was a good alternative for low-risk families in many cases, there must be adequate assessment in the hospital with continuity of care into the home. Ament (1990) noted that early discharge forced a woman to quickly become independent after childbirth. She characterized the caregiver's expectations that a postpartum woman become rapidly independent as possibly unrealistic.

Norr, Nacion and Abramson (1989) studied early discharge with home follow-up with a population of low-income mothers and infants. They noted that all the groups in their study had substantial morbidity in the first two weeks of life and suggested a wiser

use of resources would include a shorter hospital stay with more health monitoring after discharge. According to Norr et al., their study results demonstrated the need for integrating in-hospital and community-based health care in the United States.

Berryman and Rhodes (1991) and Rhodes (1994) examined outcomes for mothers and infants experiencing early discharge after vaginal birth from a military treatment facility. They concluded that twenty-four hour discharge was safe, cost-effective, promoted patient satisfaction and should be considered for implementation by other military treatment facilities where feasible. Berryman and Rhodes, like numerous authors, analyzed physical morbidity in mothers and infant as their evaluation criteria. Gennaro (1995) noted that we may not have a true picture of the prevalence of health problems in the postpartum period by examining only postpartal acute care visits and readmissions. The postpartum literature described a negative effect on the maternal-infant bond caused by a depressed mother coping with minimal support from family or friends. Effects of depression can continue to impact a family and maternal-child bond for years to come (Mercer & Ferketich, 1990).

Effects of Employment on Postpartum Adjustment

Economic factors also have an impact on the postpartum period. Numerous mothers must recover from childbirth and incorporate the new baby while planning a return to full-time employment within a few weeks after childbirth. Tulman and Fawcett (1989) noted that women who return to work part-time have an improved postpartum recovery as compared to those women who return to work full-time.

Physical and Emotional Tasks of the Postpartum Period

Gruis (1977) identified four tasks that must be accomplished in the postpartum period including accomplishing physical restoration, learning to care for and meet the needs of a dependent infant, establishing a relationship with the infant and altering lifestyle and relationships to accommodate a new family member.

Physical Adaptation

During the postpartum time the mother is typically experiencing numerous physical adaptations as her body recovers from the work of childbirth and adjusts to a non-pregnant state. Physiological factors such as a healing episiotomy, disturbed sleep cycles, fluid and hormone levels shifts and breastfeeding affect energy levels. Gardner and Campbell (1991) concluded that most health professionals view postpartum recovery as the time when a woman's reproductive organs are healed. According to Gardner and Campbell, we need to expand our recognition of postpartum recovery to include a woman's recovery of full functional ability which they describe as "the resumption of household, social and community, occupational and parenting activities" (p. 264). Health professionals should routinely assess the return of woman's functional ability as an aspect of postpartum care (Gardner & Campbell, 1991). Gjerdingen, Froberg and Fontaine (1990) identified numerous physical problems experienced by women at approximately one month after birth. "Women's postpartum health directly affects their productivity in the home and workplace, as well as the well-being of their families" (Gjerdingen, Froberg and Fontaine, 1990, p. 73). These authors concluded, "the postpartum period is neither short nor static; rather, it is a period characterized by dynamic changes in women's mental and physical health that may persist for months" (p. 82).

Alterations in Lifestyle and Relationships

The postpartum literature identified multiparas as having concerns about regulating time demands and meeting the demands of family members. The new mother must adjust her role as wife, mother, worker and housewife as she adapts to the change in her family structure. Furthermore, other psychosocial adjustments include infant care and housework demands and meeting the needs of other family members. A woman has to reorganize her time, energies and priorities after the experience of birth. The new mother may experience a change in activities, interests and friends.

Multiparas in Smith's (1989) study had more concerns about alterations in lifestyle and relationships needed to incorporate a second or subsequent child. These mothers adjusted to issues related to time management and setting priorities as well as setting reasonable expectations. Multiparas may feel they should continue with their normal routines during this stressful period. Grace (1993) found higher stress levels reported by second-time mothers at four and one-half and six months postpartum. Affonso, Mayberry and Sheptak (1988) concluded that multiparas found it stressful to curtail their activities outside the home after delivery.

Effects of the Infant's Temperament

Ruchala and Halstead's (1994) study identified the infant's temperament as affecting the mother's postpartum experience. A newborn's random sleeping and eating patterns impacts a woman's sleep patterns.

Literature Review

The author conducted a literature review specifically focused on multiparas during the postpartum period to examine this critical period in a woman's life. Research studies identify multiparas as having different concerns and needs related to incorporating a second or subsequent child into a family unit. The research literature specifically identifies factors such as family support, postpartum education and support by health professionals, the family's usual coping and communication patterns and mother and infant temperaments as components affecting the incorporation of a new infant into the family unit. Although studies have been conducted to identify postpartum concerns of multiparas, more research needs to be done in this area.

Studies Describing the Postpartum Concerns of Primiparas and Multiparas

Gruis (1977) studied the postpartum concerns of a population of 40 normal, uncomplicated mothers (17 primiparas and 23 multiparas). She specifically wondered if there were differences between the concerns of primiparas and multiparas. Primigravidas

listed return of figure to normal, regulating family demands and emotional tension; however, they differed from multiparas by listing infant behavior and feeding as foremost concerns. One concern which emerged as most prominent in both first-time and repeat mothers was the change in their figures. Their second concern was regulating the demands of husband, housework and children. Infant items that were of major concern included infant behavior, feeding and growth and development.

Smith (1989) identified the major concerns of primiparas and multiparas one month after delivery through the completion of a mailed-returned questionnaire. Multiparas in her study identified major concerns of fatigue, regulating demands, emotional tension, jealousy of other children and the labor and delivery experience. Smith noted that although most of the women in her study coped with their concerns appropriately, 64% (14 out of 22 multiparas in her sample) stated that "the hospital stay did not provide preparation for the first weeks at home with their new baby" (p. 182). Multiparas identified the major concern of regulating the demands of housework, partner and other children. Smith concluded that there were pronounced differences in the concerns between primiparas and multiparas in her study.

Affonso, Mayberry and Sheptak (1988) performed a study on a sample of 221 women; they used open-ended responses to questions asked in the first and third trimester and the sixth postpartum week. Their study looked at stressors specifically related to parity. They found that there were identified differences in reported stressors between primiparous and multiparous women. They concluded that multiparous women were more prone to find themselves in a crisis situation and needed just as much or more support than primiparas. Hiser (1991) surveyed 120 low-risk primiparas and multiparas during the postpartum period to identify their concerns and learning needs. She used a card-sort tool and questionnaire during a home interview conducted at two weeks postpartum. Concerns verbalized by mothers included worries about family finances,

meeting family members' needs and being a good mother. Women in her sample were discharged at 24-48 hours after childbirth. She noted that women in her sample sorted family items as their most frequent concern but verbalized infant items as the main concern. She theorized that spontaneous sorting of card items or choices may be less biased than verbal answers. She also noted that two-thirds of her sample had contacted a health care professional during the first two weeks postpartum, primarily for infant feeding and health issues. Hiser determined that this statistic reinforced the need for postpartum follow-up visits in low-risk populations.

Grace (1993) performed a study on a sample of 76 primiparas and multiparas using a postpartum measure called "What Being the Parent of a New Baby is Like". Her study design was longitudinal and followed women at one, three, four and one-half, and six months postpartum to examine the development of maternal role. Like Affonso et al. in 1988 and Smith in 1989, Grace concluded that "primiparous and multiparous women have postpartum concerns that are equal in intensity, if not content" (p. 437).

Ruchala and Halstead (1994) examined the postpartum experience of 50 low-risk women including 25 primiparas and 25 multiparas. They used an interview process completed in the woman's home within two weeks after discharge from the hospital. Several women in their study commented that their short hospital stays allowed too little recuperation time before discharge from the hospital. Both groups of women in their study identified fatigue as a major concern. "The overwhelming majority of women in the study attributed their fatigue and physical discomforts to too little time for recuperation after childbirth because of their short hospital stays" (p. 88). Multiparas described the early weeks as hectic as they struggled to care for the new baby while meeting the needs of other family members including the older siblings. Multiparas had gained confidence and parenting skills since the birth of their first child; this confidence allowed them to enjoy the postpartum period more with their second child.

Mothers identified numerous physical concerns including regaining their figure/losing weight, episiotomy/abdominal incision pain, sexual relations and hemorrhoids. Emotional concerns included concern about frequent crying episodes and feelings of depression. "These new mothers are expected to leave the hospital, care for themselves and their new babies, and assume household and social responsibilities sooner than ever before" (Ruchala & Halstead, 1994, p. 88).

Focus on Multiparas

Lack of Knowledge About the Specific Postpartum Needs of Multiparas

Mercer (1979) was one of the first authors to suggest that multiparas were a group with special needs and concerns. She commented on the sparsity of research on the concerns of multiparas in the literature. Mercer argued that multiparas have unique maternal tasks involved in incorporating the new child into the existing family order; the birth of a second child changed the complexity of a woman's family unit. Mercer questioned society's assumption that because a woman is adept at child care after a first child, she will be able to incorporate the new baby into the family structure with minimal difficulty. She suggested that one reason health professionals may not provide as much help as the multipara needs is because of the assumption that she knows her role. According to Mercer, the multipara was concerned with how she will relate to and love each additional child and how she will manage everyone's care. This conflict is particularly evident with the second-time mother.

Westbrook (as cited by Mercer, 1979) noted that parity adversely affected a woman's attitudes. Westbrook concluded that women having their second and fourth infants were more rejecting of their infants than those having their first or third infant. Jacobs and Moss (as cited by Mercer, 1979) observed that mothers showed less social, affectionate and care taking behavior with the second child than the first. Rhode and Groenjes-Finke (1980) also noted that as the mother's age and parity increased, she was

more likely to rate her previous mothering experience highly. They determined that coping mechanisms devised with previous pregnancies, whether good or bad, were more likely to be utilized with later pregnancies. They concluded that multiparous mothers should be carefully assessed for the presence of unsuccessful coping mechanisms. These authors noted a definite change in postpartum concerns between two days and six weeks with women expressing many concerns involving psychosocial considerations at six weeks as compared to concern with physical needs at two days postpartum.

"Review of the literature yielded little insight into the experiences and caring needs of repeat parents" (Jordan, 1989, p. 135). Smith (1989) concluded that her sample of multiparas identified issues of emotional tension as a major concern. Affonso, Mayberry and Sheptak (1988) proposed that "supportive care for multiparas is long overdue" (p. 317). Affonso and Mayberry (1990) noted that the National Institutes of Health and the Institute of Medicine have reported that multigravid women with preschool-aged children have additional psychosocial risks.

Beer (1994) wrote an editorial about the emotional needs of a woman who is already a mother and determined that the multipara needed both physical and emotional care. She concluded that the multipara has very different concerns than the first time mother. According to Beer, the second time mother experienced a notable difference in her support system and received less attention and pampering from friends and family. Beer concluded that "each childbearing adventure is as unique as the child it bears" (p. 38). Her editorial was a plea for recognition of the emotional needs of the multipara.

Women also described the task of resolving prior negative experiences. Smith (1989) concluded that many multiparas identified the labor and delivery experience as a source of concern. These women identified a need to discuss the actual childbirth experience, compare their fantasy experience to the actual experience and ventilate feelings of loss or unmet expectations.

Research Studies on The Postpartum Concerns of Multiparas

As previously stated, Gruis (1977) sent a questionnaire listing potential areas of concern drawn from the literature to 40 mothers (17 primiparas and 23 multiparas) one month after delivery. The greatest concerns of multiparas included return of their figure to normal (22 of 23 subjects), regulating family demands (21 of 22 subjects), finding time for self (21 of 23 subjects), fatigue (19 of 23 subjects) and emotional tension (20 of 23 subjects). Multiparas' concerns reflected the strain that a new child placed on the rest of the family.

Hiser (1987) offered information about multiparas as an exclusive group and recommended further research in the area of postpartum concerns. She used an interview and card-sort method to study 20 multiparas at home 10-14 days postpartum to identify concerns of multiparas during the early postpartum period. Meeting the needs of everyone at home and other family items were most frequently sorted as a concern. Hiser determined that the first two weeks postpartum were a critical time for new parents to adjust to lifestyle changes. Items of concern included: 80% identified meeting the needs of everyone at home, 75% identified their weight, 70% identified their flabby figure and regaining their figure as concerns.

Hiser recommended that all multiparas receive information about integration of the new family member, sibling adjustment issues, mother's thoughts and feelings about adjustment of the expanded family, getting back in shape including diet, rest and exercise, newborn growth and development and health and safety issues in a postpartum education program provided by nurses.

Moss (1981) noted that only a few studies addressed the concerns of postpartum mothers and the data did not differentiate between concerns of primiparas and multiparas while hospitalized. She provided one of the few reported studies that included breastfeeding mothers. Moss studied concerns of 56 multiparas on the third postpartum

day through the use of a card-sorting tool. Mothers in her study were less concerned about themselves and their infants and more concerned with family relationships. The greatest number of concerns were found in women under 20 years old, having one other child at home and delivering male infants. Moss reported that the mothers in her study had many interests and worries which may not have been dealt with during their three day stay on the postpartum unit. She suggested that the greatest point of stress may occur after the mother's discharge from the hospital and recommended a postpartum home visit.

Henning (as cited by Moss, 1981) reported results from interviews with 15 multiparas and found that 60% were concerned with reestablishing family relationships, 47% felt they needed help in the home to allow for recovery, and 40% were concerned with meal planning.

Multiparas' Concerns

The postpartum literature identified specific concerns of multiparas as they adjust to the arrival of a second infant. Issues identified by multiparas include concerns about sibling adjustment, infant care concerns, concerns about changes in the marital relationship and the effects of fatigue, mood swings and family support on their adaptation. These topics were the focus of various postpartum research studies.

Adjustment of the older child to the infant. Multiparas in Gottlieb and Mendelson's (1995) study expressed concern over separation from the firstborn child, feelings of guilt and loss because they no longer had an undivided relationship with the older sibling and concern about their ability to mother two children. Hiser (1991) found that 73% of the multiparas in her study verbalized concern about the sibling's reaction to the newborn.

Infant care concerns. Fifty-seven percent of the women in Hiser's sample (1991) with circumcised sons were concerned about their care. She concluded that mothers with male newborns may need instruction in child-care techniques even if this is not their first

child. She suggested that women feel more familiar with a same-sex infant. "The multipara with a male newborn who had females previously may need extra assistance with child care" (p. 202). She concluded that nurses may erroneously assume that the experienced mother needs less teaching.

Effects on the marital relationship. Mercer and Ferketich (1990) studied the impact of birth on family functioning eight months after birth. Some families in their sample reported a decline in marital satisfaction and strain in the relationship after childbirth. Their results noted that women generally reported a greater overall change in their lives after births than fathers.

Postpartum fatigue. Gardner and Campbell (1991) described the impact of fatigue on a woman's recovery after childbirth. These authors concluded that fatigue may have an impact on a woman's ability to cope with parenting. "The women with the highest fatigue levels were among the younger mothers, married, with a low family income, two to three other children, less education, less household help and child care problems" (p. 264). Smith's (1989) sample of multiparas also identified fatigue as their most frequent concern. Pugh and Milligan (1993) studied childbearing fatigue and found that fatigue affected mothers' return to functional status and her adaptation to the mothering role. Parity and age significantly affected levels of fatigue.

Effects of support. Nuclear families may be very isolated and experience minimal support from extended family members at a time when the woman has increased demands. Smith (1989) determined that the availability of support can have a major impact on a woman's recovery from childbirth.

Gottlieb and Mendelson (1995) focused on the role of social support and how it affected the moods of multiparas and their subsequent ability to cope. Practical support included the assistance received to meet physical, childcare and emotional demands. Multiparas found practical support to be the most useful and desirable during the

postpartum period. Gottlieb and Mendelson acknowledged that multiparas received varying levels of support. A paradox occurred when family and friends recognized the multipara's need for extra support but considered the mother an "old pro" at parenting and childcare and did not offer help. Gottlieb and Mendelson echoed numerous authors who suggested that women delivering infants today may not have the same level of support offered to childbearing women of the past. The high number of employed women has been suggested as a contributing factor to this general lack of support.

Gjerdingen and Chaloner (1994) examined a group of mostly employed primigravidas and their experiences with household roles and social support during the first year after childbirth. Women viewed their husband's participation in household chores as declining over time; as the husband's contribution to housework gradually declined, the woman's satisfaction decreased. Women classified adequate support from their husbands as including both child care and housekeeping efforts. They noted that friends and relatives helped out less frequently as the year after childbirth continued. These authors found "diminishing levels of emotional and practical support for women at a time when the need for support was likely greater" (p. 58).

Women in Affonso, Mayberry and Sheptak's (1988) study also perceived a lack of support from their spouses and health care professionals. Partners who did not share child care responsibilities and help with housework were perceived by the women as not being supportive.

Jordan (1989) examined support behaviors identified as helpful and desired by second time parents over the perinatal period. Couples in her study classified material support as most helpful and desired; they most frequently wanted help with child care and household chores including the provision of meals. Gender differences were apparent in types of support and specific behaviors identified as helpful or desired. Mothers wanted

assistance with childcare, help with household chores, preparing and providing meals and gifts.

Effects of postpartum depression. Mercer and Ferketich (1990) determined that one-fourth of their sample of women had high levels of depression continuing at eight months postpartum. Their sample population included both high and low-risk women and their partners; perhaps the high-risk conditions and resulting stress predisposed the women to ongoing depression.

DiMatteo, Kahn and Berry (1993) conducted focus groups with new mothers to encourage them to describe their experiences of labor, birth and postpartum. Mothers experienced a variety of emotions immediately after childbirth including a sense of disappointment, sadness instead of joy and self-criticism about how they performed in labor. Eighty-five percent of the new mothers in their sample experienced postpartum blues; in addition, 10-15% of new mothers experienced postpartum depression.

Summary

The research literature supports the assumption that the postpartum period is a time of adaptation in the life of a mother and her family. The way in which a family copes with the various adjustments has implications for their future functioning and viability. Numerous factors can impact on a family's adjustment including the amount of support they receive, a family's usual coping patterns during periods of adaptation, age and sex of other children at home, the strength of the couple's marital relationship, the labor and delivery experience, length of hospital stay after childbirth, birth complications and temperament of the infant. Ongoing postpartum research must continue in order to acquire information about postpartum concerns and needs during a vulnerable time in the life of a woman and her family.

Methodology

Research Design

The investigator used a descriptive telephone survey design to discover and explore the postpartum concerns and needs of multiparas. A descriptive study was used because little is known about the concerns and needs of this group of military beneficiaries. The investigator interviewed the subjects twice during the postpartum period to determine changes that occurred in the subjects' concerns and needs over a three week period. Massey (1995) stated that the descriptive design is categorized as a nonexperimental design in which the researcher efficiently and effectively collects a large amount of information about a problem in a realistic setting. According to Massey (1995) "a descriptive design is typically used to observe, describe or document aspects of a situation; this type of design does not concern the relationship between variables" (p. 55). Tanner and Lindeman (1989) characterized the primary purpose of a descriptive study as describing a phenomenon of interest to nursing. A descriptive qualitative study is one in which qualitative data or data in the form of words are used a basis for describing the phenomenon of interest (Tanner & Lindeman, 1989).

Data was obtained through telephone interviews conducted with postpartum women during the first and third weeks postpartum. The investigator decided to use a telephone interview data collection strategy because she assumed women would be more agreeable to participating in telephone surveys as compared to in-home interviews due to the time constraints and fatigue of the postpartum period. Funding constraints also made the telephone interview design a more logical choice for the researcher. Polit and Hungler (1991) state that surveys can be utilized to obtain "data from a portion of a population for the purpose of examining the characteristics, opinions, or intentions of that population" (p. 192). Massey (1995) determined that surveys are typically an easy approach for rapidly collecting a large amount of information. Burns and Grove (1993) conclude that there is a

higher response rate to interviews as compared to questionnaires, leading to a more representative sample. They also state that interviews are a form of self-report and the researcher must assume that the information provided is accurate. Interviews are often flexible and elicit information with greater depth.

Disadvantages in conducting interviews are that they may be more costly and time-consuming than other data collecting techniques, such as questionnaires. Limitations of the survey design include possible reluctance on the part of the subjects to share certain information about themselves. In addition, the information obtained may be superficial in nature. Self-report is another issue that impacts validity (Massey, 1995). Burns and Grove (1993) cautioned that researcher bias in interpreting data could be a threat to internal validity. Burns and Grove (1993) suggested that the interviewer must learn how to establish a permissive atmosphere in which the subject will be encouraged to respond to sensitive topics.

Pilot Study

This pilot study was conducted in a military medical facility comprised of 55 beds in a large western city. The obstetrical unit delivered approximately 45-55 infants per month and had a policy of discharging the mother approximately 24 hours after birth. Polit and Hungler (1991) described the purpose of the pilot study as obtaining information for improving the project or for assessing its feasibility. A convenience sample of eight subjects, all multiparas who were low-risk mothers and who had experienced a vaginal delivery, was obtained from a military facility in the western region of the United States.

Data Collection Procedure

Names of potential postpartum subjects were obtained from the staff of a local military facility during the time the subject was hospitalized after childbirth. All patients were approached during the postpartum period by the investigator and asked to participate in the study. Prior to obtaining informed consent, the purpose, risks and confidentiality of

the study were stated. The investigator informed the subjects they could refuse to participate in the telephone interviews and withdraw from the study at any time; their decision to not participate would not influence their routine postpartum care provided by the facility. The subject was given a copy of the consent form explaining the study (Appendix D). After consent was obtained, the investigator obtained demographic information using a close-ended questionnaire (Appendix A). She also determined the most convenient time to call the mother to conduct the postpartum interviews.

The investigator conducted all interviews from her home telephone in a quiet room with no other person present. Telephone contact was made at the time specified as most convenient by the subjects during the hospital meeting. Each telephone interview began with the investigator identifying herself and reviewing the purpose of the research study. The participants were asked if this was a convenient time to answer questions related to their postpartum experiences; if the woman indicated she had time to participate, the researcher continued with the questionnaire. All interviews were conducted between the fifth to the seventh postpartum day and again at the 18th to 20th postpartum day. Interviews were anticipated to last less than 15 minutes. Eight women agreed to participate in the study and completed the two interviews during the first and third weeks postpartum, bringing the total convenience sample size to eight women (N=8).

Sample and Sampling Procedure

A convenience sample of eight subjects, all multiparas who were low-risk mothers and who had experienced a vaginal delivery, was recruited for this pilot study. Burns and Grove (1993) conclude that convenience samples provide a method to conduct studies on topics that could not be examined using probability sampling. "They provide means to acquire information in unexplored areas" (p. 245). Descriptive exploratory studies usually require nonprobability sampling because of the nature of the concepts being examined.

"Exploratory studies are not intended for generalization to large populations. They are designed to increase the knowledge of the field of study" (Burns & Grove, 1993, p. 244).

Eligibility for the study included:

1. Multiparas with no diagnosed high-risk maternal medical problems before or during pregnancy.
2. Multipara with no prenatal, intrapartum or postpartum complications.
3. Mother speaks, reads and writes English.
4. Mother experienced a vaginal delivery.
5. No previous stillbirths or neonatal loss.
6. Newborn's Apgar score of seven or higher at five minutes.
7. Newborn not resuscitated at birth.
8. No pathologic hyperbilirubinemia of newborn.
9. Newborn weight between 2500 and 4000 grams at birth.

The researcher identified these criteria in order to study low-risk women experiencing an uncomplicated childbirth experience. The birth of a sick or premature infant with birth complications will change the concerns and needs of a mother. The author's purpose was to capture data from women incorporating a healthy newborn into the family.

Protection of Human Subjects

Approval for this study was obtained from the Colorado Multiple Institutional Review Board (COMIRB) at the University of Colorado Health Science Center (Appendix E). Additional approval to conduct the study was obtained from the United States Air Force Academy Hospital and Department of the Air Force (Appendix F). Prior to each interview, the purpose, risks and confidentiality of the study were reiterated. The researcher also informed the subjects they could terminate the interview and withdraw from the study at any time and their postpartum care would not be affected in any way.

Each participant retained one copy of the consent form for reference during the study and the investigator retained one copy for her records. Confidentiality and anonymity were assured because all forms were coded by the researcher and the forms were stored in a locked drawer in the researcher's home. Demographic data forms and interview information were destroyed after the study. Only the investigator had access to the data.

Instrument

Hiser (1991) summarized various methodological issues in her article on postpartum concerns. She reported that researchers had used a variety of methodologies including frequent use of questionnaires and interview methods to assess postpartum concerns. An additional variable was the timing of data collection which depended on the research design. Hiser concluded "different methodologies used to determine postpartum concerns may have had an influence on the results" (p. 167).

After completing the literature review, the author decided to focus the postpartum interviews to obtain information about concerns as detailed in the various research studies. The instrument for this pilot study consisted of a series of open-ended questions designed specifically to obtain information about the postpartum woman's lived experience, her support system during the first three weeks postpartum, her postpartum concerns, satisfaction with postpartum teaching provided by the hospital, sibling preparation prior to the birth, sibling reaction after the birth, and any problems or complications encountered by the woman in the time period after the birth (Appendixes B & C). The author used open-ended questions to encourage the participants to share their experiences in a manner that felt comfortable .

The instrument used for the telephone interviews was adapted from a previous telephone survey conducted by Ruchala and Halstead (1994). The interview was developed after an extensive review of the postpartum literature. To establish content

validity, the author submitted her questionnaire to two experts in maternal-child nursing and sought feedback on the content and wording of the questions.

Content Validity. To establish content validity of the revised questionnaire, the investigator gave the instrument to two experts in the maternal-child area. The experts included a nurse-midwife with many years of experience in delivering babies and providing postpartum care to mothers. The other expert is a manager of a local military obstetrical unit who has worked in the obstetrical area in a number of military treatment facilities and has extensive experience with caring for military beneficiaries. A cover letter explaining what was required of the experts accompanied the questionnaires. After reviewing the questionnaires, the experts suggested minor modifications in wording to improve clarity.

Reliability. The researcher helped establish the reliability of the questionnaire by conducting each interview and asking each question in the same fashion. Only the investigator conducted the telephone interviews.

Demographic Data

Demographic data consisted of age of the woman and her partner, ethnicity, relationship status, household members, education, occupation, employment, income, mother's gravidity and parity status, age of other children in the family, childbirth details, number of hours of postpartum hospitalization, infant's sex, infant's weight, length of labor, birth complications and type of feeding anticipated. The data were used to describe the characteristics of the sample.

Data Analysis

Initial demographic data described the sample. Descriptive statistics were used to analyze the data. "Descriptive statistics allow the researcher to organize the data in ways that give meaning and facilitate insight, to examine a phenomenon from a variety of angles in order to understand more clearly what is being seen" (Burns & Grove, 1993, p. 473).

Massey (1995) categorizes descriptive statistics as including frequency distribution,

measures of central tendency (mode, median, mean), measures of variability (range, standard deviation) and bivariate descriptive statistics. Frequency distributions and descriptive statistics were computed for age, ethnicity, relationship status, household members, education, occupation, employment and income, gravidity, parity, age of other children in the family, length of postpartum hospitalization, infant's sex and weight and type of feeding.

Content analyses were used to examine the responses to the interview questions asked in the first and third postpartum weeks. The responses were handwritten and later typed by the researcher. The investigator grouped all subjects' responses to a specific question on a separate piece of paper. Open-ended interview responses were analyzed for themes, words, and meaning. Burns and Grove (1993) concluded that content analysis provided a "systematic means of measuring the frequency, order or intensity of occurrence of words, phrases or sentences" (p. 597).

Summary

This section described the research design, site, sample and sampling procedure used. In addition, the investigator defined the research instrument, protection of human subjects, data analyses and limitations of the study. The next section will describe the results of the study.

Results

The Subjects

The purpose of this pilot study was to explore and describe the postpartum concerns and needs of multiparas in the first three weeks after childbirth. Demographic variables as well as quantitative and qualitative measures were examined in order to acquire an understanding of the needs of women after the birth of a second child. This chapter will describe the sample followed by a discussion of the responses to the telephone interview questions.

Description of the sample

A convenience sample of eight postpartum women was used. All obstetrical care occurred in a military treatment facility in the Western United States. Demographic information was obtained through completion of a questionnaire by the subject after she gave consent to participate in the study. The investigator also performed a medical record review for details about the prenatal history and labor and delivery experience. Of the eight women interviewed, all were married and Caucasian.

The mean age of the subjects was 31 with a range of 25 to 34 years of age. The educational level of these subjects ranged from 12 years ($n=1$), some college ($n=5$), to a bachelors degree ($n=2$). Two of the women were active duty service members who planned to return to full-time employment six weeks after the birth; both of these women intended to separate from the service within one to three months after the birth. Employment plans for other subjects included full-time employment for two women and part-time employment for one subject. Seven of the women anticipated breastfeeding the second child; they had breastfed their firstborn child as well. Family income was distributed as follows: \$10,000-\$19,999 ($n=1$); \$20,000-\$29,999 ($n=2$); \$30,000-\$39,999 ($n=2$); \$40,000-\$49,999 ($n=2$); and \$50,000-\$59,999 ($n=1$). The mean family income level was \$30,000-\$39,999 for this group of subjects. Table 1 presents the sociodemographic characteristics of the sample.

Table 1

Summary of subject age, gravity, parity, length of hospitalization, sex and weight of the infant

Subject	Age	Gravity	Parity	Length of Hospitalization	Sex	Weight
<hr/>						
1	25	2	2	28.5 Hrs	Boy	7-2
2	29	2	2	38.5 Hrs	Boy	5-9
3	35	5	2	31 Hrs	Boy	7-7
4	31	2	2	42 Hrs	Boy	6-15
5	31	2	2	30 Hrs	Girl	8-8
6	34	6	2	24 Hrs	Boy	6-10
7	29	2	2	42 Hrs	Girl	7-10
8	32	3	2	32 Hrs	Girl	7-3
<hr/>						
Mean	30.7	3	2	33.5 Hrs	N/A	7.12

Results from Analysis of the Research Question

The research question asked: What are the postpartum concerns and needs of multiparas in the first three weeks after childbirth? Telephone interviews using focused questions were conducted during the fifth to seventh postpartum day and again during the 18th to 20th postpartum day. Interviews ranged from an average length of fifteen minutes to a lengthy interview lasting 90 minutes. Content analysis was used to analyze the responses to the open-ended interview questions. The investigator examined the responses for recurring themes and content. Each focus question will be discussed individually in the following section.

First Telephone Interview Responses

Question 1. Describe your life since you brought the baby home from the hospital.

All of the subjects responded to this question with comments about how their life and routines had changed during the first days at home. Most women had anticipated a busy time and seemed to be coping with the changes in a very positive manner. Comments included, "a little busy but it is to be expected," "I am tired but I actually feel a little better than I expected," "tired," "it is better than I thought it would be," and "it is pretty hectic; I don't have a lot of time to do anything."

Question 2. What do you do to cope with these changes?

The subjects were using a variety of coping measures in the first week postpartum. Four of the subjects described strategies to make up for lost sleep at night including napping and resting whenever possible. One subject stated that it was important to keep remembering her needs during this hectic time. Coping measures included hot baths, getting out of the house for short periods and doing special things for herself. One woman allayed anxiety about the infant by setting the alarm at night and getting up to check on the baby. She stated, "I am not nearly as nervous this time." The remaining subjects did not describe any particular coping measures.

Question 3: What kind of support have you had since the birth?

All subjects identified a support system with the husband being the primary support person and family members arriving at various intervals during the postpartum period to assist with child care and household duties. Other support people included the subject's grandmother, church friends, the Family Advocacy Nurse, friends and neighbors.

Question 4: Who is helping you now?

Seven of the subjects identified the husband as the primary support person. Additional support people included the woman's grandmother (n=1), the woman's mother

(n=3) and the woman's mother-in-law (n=1). The mothers of two subjects were arriving in the second postpartum week to offer assistance. One subject stated that she had had no support for two days and was coping on her own. Her husband had returned to work in the first two to three days after the birth; he planned to take a few days off work in the second week after birth. This mother had experienced a physical complication and sounded angry and frustrated at her lack of support.

Question 5: How would you rate the level of support you received on a scale of from 0-10? How would you change the level of support?

Five of the subjects related their level of support as "great" or a 10. Two rated their level of support as "good" or a 9. One subject rated her level of support as "poor" or a 3. This subject verbalized anger and frustration related to her husband's level of support during the telephone interview. She commented, "Daddy is not doing so much." One subject commented, "It would have been hard without my grandmother; I definitely needed someone to help."

Question 6: How did you feel about taking the new baby home after the birth?

Six of the subjects commented that they were ready or definitely ready to leave the hospital. Comments included, "I was definitely ready to leave the hospital; it is hard to sleep in the hospital and is easier being home." "I was absolutely ready to leave," "I wasn't nervous this time; I was ready to go home," "I felt fine about taking her home." One subject commented that she was angry because she got no rest in the hospital at all. She stated, "anytime the baby smacked her lips, they brought her to me. I wanted to go home to get on my own schedule." One subject with a jaundiced infant commented, "I was concerned about his jaundice; I wish they would have checked his bilirubin more closely before we went home." Another subject stated, "I was scared that first night at home because I thought he was too small and maybe I came home too soon." This mother left

the hospital 24 hours after the birth because she found the hospital room too hot and uncomfortable. She was ambivalent because of her need for physical comfort versus her concerns about the infant.

Question 7: What have you been concerned about since you've been home with the baby?

Two of the subjects verbalized no concerns about any aspect of their or the baby's physical state. One subject had experienced a uterine prolapse on the fourth postpartum day; she visited the Emergency Room and received pain medication for her condition. She stated that she had to remain in a horizontal position because her cervix was visible beyond the introitus when she stood up. This subject verbalized negative feelings about the level of support she received from her husband. One subject explained that she had been identified as being at high-risk for postpartum depression because of severe anxiety and difficulties with sleeping in the last two months of her pregnancy. She had been contacted by the Family Advocacy Nurse and was sleeping appropriately during the first week postpartum. She stated, "I think I was wound up and wondering if I could cope at home with two kids." This subject's medical record did not reveal any of her anxiety issues during the pregnancy. One infant was jaundiced and had received a bilirubin check. One mother stated that her milk did not come in until postpartum day five. She was concerned that the infant wasn't receiving enough breastmilk and was supplementing the baby with formula. One mother was concerned about waking the baby at night to feed; she set her alarm for two nights to wake up and feed the infant. After a discussion with the Family Advocacy Nurse, the mother and her husband decided to let the baby wake them when she was ready to feed. One mother took her two day old infant to the Emergency Room for an examination because the infant didn't urinate the first day at home. The infant was catheterized during this Emergency Room visit and didn't experience any further problems with urination. The mother described the Emergency

Room visit as difficult and anxiety producing. See Table 2 for a summary of postpartum concerns and needs.

Question 8: Did you receive any teaching related to caring for yourself and your infant during your hospitalization?

Seven of the eight subjects described verbal instruction provided by the Obstetrical Staff. One woman received instruction from various postpartum handouts. Comments included, "I received normal postpartum teaching including things to expect and do for the baby. Nothing extra or out of the ordinary unless you ask for it." Another subject commented, "they are very thorough, almost redundant about circumcision and cord care. Being a second time mom I knew a lot of this information." Remarks included, "the staff seem to have a lot of confidence in a second time mom" and "I was encouraged to ask questions."

Question 9: How would you describe the teaching you received?

Six of the subjects rated their postpartum education positively. Comments included, "informative," "adequate (n=2)," "helpful," "thorough," and "on a scale of 1-10, about a 7." The subject with the uterine prolapse stated, "for most people it was probably adequate; however, I was not prepared for the uterine prolapse." One subject commented, "not as extensive as the first time. I think they expected me to read all the handouts they left in the room." Another woman remarked, "I was not really mentally there when they were telling me all this stuff. It feels like a crash course--too much, too fast."

Question 10: Were you satisfied with the teaching you received?

Seven of the eight subjects were satisfied with the postpartum teaching. One subject advised, "gear the information more to what the mom needs." Although the woman with the uterine prolapse recognized it as a rare complication, she was not satisfied with the postpartum teaching because she was not prepared for the possibility that a prolapse could occur.

Question 11: What other information do you think should be included for mothers of second or subsequent children to prepare you for life with more than one child?

Two of the subjects had no reply to this question. One woman responded, "nothing can really prepare you for the first few days at home." Two subjects would have liked information about helping the sibling adjust to the new infant. Their comments included, "dealing with the older child and that to me is a real key point which was not mentioned at all" and "how to help the older sibling adjust to mom not being available. How to adapt to the baby coming; that is new and what you need to know." One subject would have liked to return to a LaMaze reunion or follow-up class after the birth to talk with other breastfeeding mothers about concerns. She commented, "I need time management and stress management information and information on how to get my child to adjust to the new baby. The perception from others is that it gets easier the more children you have." One subject observed that it would be nice to have someone call her at home to check in and ask how things are going. One woman reported that the staff came through with what she needed.

Question 12: Did you obtain information about what it is like to parent two or more children before the birth?

All eight subjects indicated concerns about how their older child would adjust to the new baby. Generally the answers to this question were vague and difficult to analyze. Four of the subjects answered no to the question. Although the parents were concerned about helping the older child adjust to the new baby, they did not know where to find information to facilitate this process. Two subjects responded that the woman and her husband planned a strategy based on their instincts. One woman commented, "we did it on our own. We haven't seen much in print but haven't gone looking." One subject asked her family for ideas on how to facilitate sibling adjustment; she also rented videos of

pregnancy and childbirth for her older child to watch. One subject followed the advice of a family friend and gave the toddler a new doll as a gift. One subject attended a formal sibling class with her five year old daughter.

Question 13: How did you obtain this information?

This question's focus was on how the parents obtained information about parenting two or more children before the birth. The investigator was interested to observe that all subjects responded by describing their efforts at preparing the older sibling for the arrival of the new infant. Strategies included purchasing books about the new baby and nightly reading sessions about being a big brother or big sister. Several parents encouraged the older sibling to listen to the baby's heartbeat during a prenatal visit. Parents used real life play with a doll to model holding, feeding and caring for the new baby. One couple found information in various parenting magazines on how to incorporate the new baby into the family. Couples talked to the older sibling and described the characteristics of the new baby. One subject with an 8 year old son commented, "he was psyched through the whole thing. We kept him updated and he went to an ultrasound appointment and listened to the baby's heartbeat."

Question 14: Where did you obtain this information?

Most subjects' answers to this question were vague and did not really answer the question asked by the investigator. Answers included, "books," "instinct," "friends," and the "sibling class."

Question 15: How do you feel about early discharge after childbirth?

Seven of the eight subjects were very positive about early discharge. The average length of stay for this group of eight subjects ranged from 24 to 42 hours with a mean of 33.5 hours. Some facilities would not categorize this length of stay as early discharge. Comments included, "it worked well this time; the first time I was on Medicaid and felt kicked out too soon" (length of stay 28.5 hours), "I was ready to go home; I spent enough

time and was given the option of staying longer if I wanted" (length of stay 31 hours), "the timing was fine for me; with a second you need a little more time to rest" (length of stay 42 hours), "I considered asking to stay another day but realized I would get more rest at home" (length of stay 30 hours), "I was happy to go home; I didn't get much sleep" (length of stay 24 hours). The subject with the uterine prolapse verbalized mixed feelings about early discharge; she wondered if the uterine prolapse would have happened if she had stayed in the hospital longer (length of stay 38.5 hours).

Question 16: Have you or your baby encountered any problems or complications since you've been home from the hospital. What? Did you seek care for this problem and was it resolved?

See Table 2 for a summary of postpartum needs and concerns. Subjects provided information to this question during the response to question number seven on postpartum concerns. Four of the subjects reported nothing abnormal. Problems or complications included a uterine prolapse, severe anxiety and a migraine headache ($n=1$), a late onset of milk coming in at five days postpartum and the infant with no voiding noted in 24 hours.

Second Telephone Interview Responses

Question 1: Can you tell me what your life with the new baby has been like since we last talked?

Six of the eight subjects made positive comments about changes in their routines or sleep status since the first interview. Two subjects noted that they had gotten into a fairly normal routine and that life did not seem so hectic now. Women commented, "I'm tired but not too exhausted," "I am able to rest and get some recuperation done," "I feel good today because I got a lot of sleep last night," "I feel good; the baby is letting me sleep." Getting an adequate amount of quality sleep was a significant factor to this group of multiparas. The mother with severe anxiety during her prenatal course reported that she continued to have trouble sleeping and had obtained some medication to facilitate rest.

One mother commented that her postpartum course was "about the same as before-one day very energetic and active and the next day exhausted and sore.

Question 2: What are you doing to cope with the changes in your life?

All subjects verbalized strategies intended to facilitate rest and manage the work of caring for two children and a household. One subject commented, "the house is less clean now." Strategies included: resting whenever possible, usually in the late afternoon or evening ($n=4$), visiting a friend for the weekend ($n=1$), taking it as it comes and not expecting too much ($n=1$), getting up before the children in the morning to accomplish necessary activities ($n=1$), giving more time and attention to the older sibling in the evening ($n=1$), and planning ahead for the longer length of time to get ready to go out ($n=1$).

Question 3: What kind of support are you receiving to cope with these changes?

All subjects identified the husband and family members as primary support people during the first three postpartum weeks.

Question 4: On a scale from 0-10 how would you rate the level of support?

Six of the subjects were very positive about their support and rated it as a 10. One subject gave her support system a rating of 9. The mother with the uterine prolapse again rated her level of support as poor or a rating of 3. During the second interview she sounded less frustrated and more rested. She acknowledged that she was feeling better and reported that her husband was providing more support with child care and household chores. She confessed that the first postpartum week had been a very difficult experience for her.

Question 5: Would you have liked more support from health professionals since the birth?

Five of the subjects responded that they did not need further support from health professionals. Their responses included, "great support" and "supportive." The subject with the uterine prolapse responded that she did not see how hospital professionals could have been more helpful; she needed household help more than medical support. One subject classified the support as pretty good. She stated that she had numerous questions about breastfeeding and found answers by looking up the information in a book. Her response was, "sometimes I think they still assume a lot and that you remember everything from before." One subject would have liked periodic calls from the pediatrician to touch base once a week for the first month after the birth. She was concerned because she had no after-hours number to call for advice or information (she was receiving pediatric care at a small clinic in a facility with no emergency department). This woman would have liked to have access to a twenty-four hour information line. The subject reported also that she was not told when to return with the baby for ongoing care after the two week check.

Question 6: What have you been concerned about since you've been home with the baby?

One subject reported no concerns. The remaining seven subjects described a variety of concerns related to themselves or the infant. See table 2 for a summary of postpartum needs and concerns. One subject reported that the baby was jaundiced in the second week of life; he was taken off breastfeeding for twenty-four hours to allow the bilirubin level to fall. The mother coped with severe engorgement for this time period. Another mother described having "the baby blues" and reported that her infant had had jaundice which necessitated five blood checks for bilirubin levels in one week. Infant concerns verbalized by mothers included constipation ($n=2$), an episode of projectile vomiting ($n=1$), anxiety that the umbilical cord was not drying properly ($n=1$), and concern about a "huge spit-up" ($n=1$). One mother had experienced three severe headaches in one week. One subject described a severe choking episode in which the

infant turned blue and the mother could not clear the airway. The mother called 911 and paramedics came to treat the infant; by the time they arrived, the infant was breathing normally and had a pink color.

Question 7: How is your older child adjusting to the new baby? What behavior have you noted? What are you doing to help the child cope?

Behaviors described by the mothers varied depending on the age of the older siblings; six of the siblings were under the age of three years with a range of 17 months to 3 years. Ages of the two remaining older siblings were five and eight. Generally the mothers of toddlers under the age of three described clingy and demanding behavior by the older sibling. Some toddlers did not regress in their routines in any way; two children actually became interested in potty training or sleeping in a regular bed after the baby arrived. The mother of a two year old daughter continued with the child's normal routines and included her in baby care activities. One 17 month old sibling was sick for a week and screamed every time the mother picked up the baby. A subject commented, "he's in his terrible two's anyway so it is hard to tell how much is the baby." A mother of a three year old child noted that the older daughter wanted all the equipment needed for the baby so she frequently missed items from the changing table. A mother of an eight year old son commented that she had not continued the older child's reading sessions because of the busy evenings with the baby. The child told the mother how much he missed the shared reading sessions. A mother of a five year old girl reported that the older child seemed more responsible about picking up after herself and helping out.

A major coping strategy of mothers included involving the children in activities of baby care and lavishing attention on the older sibling. One three year old big brother loved to help with bottle feeding the infant. Mothers described the older siblings as typically interested and gentle with the new baby. The younger children under three years of age had to be reminded to do gentle touching. One mother reported that her 27 month

old daughter had tried to clean the infant's ears with Q-tips. The infant had suffered no ill effects from this episode. The mothers of younger firstborn children described their concerns about safety and their strategies for insuring that the infant remained safe while the older sibling was in the vicinity. Mothers reported supervising every interaction between the older child and the infant. Mothers frequently commented on the personality of the new baby and how the new infant differed from the firstborn child.

Question 8: Looking back, do you feel your hospital stay was long enough after the birth?

Six of the eight subjects reported that the length of the hospital stay was fine. The subject with the uterine prolapse commented, "considering my problems, it could have been longer." Another subject responded, "probably two days would have been better since I had to take the baby back in for her bladder problem; I was not offered the option of staying longer in the hospital."

Question 9: Have you or your baby encountered any problems or complications since you've been home from the hospital? How was the problem resolved?

See Table 2 for a summary of postpartum needs and concerns. Information related to this question was previously described in question number six. Additional responses included: One breastfeeding infant experienced slow weight gain and was seen by the pediatrician for an extra weight check; the infant's weight gain was appropriate at the second visit. One mother stated, "I expected more help at the beginning; I didn't expect to go through all the emotional things too." The mother with extreme anxiety experienced a severe breast infection late in the first postpartum week; she took a course of antibiotics and decided to stop breastfeeding so she could obtain medication for her ongoing sleep problems. Two mothers described a couple of "weepy eyed days" but no emotional reactions that continued. The mother of the infant with the choking episode remained

extremely anxious and talked to the investigator for a total of 90 minutes during the second postpartum interview. She had experienced a sinus infection, conflicting advice from providers regarding appropriate medication to take and conflict and demands from her husband's ex-wife and concerns about step-children. She commented, "I won't be able to relax and not worry about this baby until he is seven months old when the danger of sudden infant death syndrome is less." One mother described concerns about the adequacy of her breast milk; she supplemented her infant with formula beginning on the fourth postpartum day.

Table 2

Physical and emotional postpartum concerns during the first three weeks after childbirth

Subject	Mother	Infant
1	Severe breast engorgement while infant off breast milk	Jaundice; off breastfeeding x 24 hours Slow weight gain
2	Uterine prolapse; mother seen in Emergency Dept Poor support system Sinus infection; on antibiotics	Jaundice; bilirubin level checked x5
3	Anxiety during pregnancy; at risk for depression Sleeping problems antepartum and postpartum Breast infection during week one postpartum; stopped breastfeeding; received antibiotics	Constipation; projectile vomiting x 1
4	Headaches	Jaundice; bilirubin tested
5	None	Questions on waking infant at night; huge "spit-up" x 1
6	Anxiety; migraine headache Sinus infection treated with antibiotics	Choking episode-infant turned blue Mom called 911
7	Milk did not come in until postpartum day 5; concerns about adequacy of breastmilk	Constipation
8	None	Baby did not urinate for 24 hours; catheterized in Emergency Dept.

Breastfeeding Concerns

Although the investigator did not specifically question the subjects about their experience with breastfeeding, all mothers made numerous comments about this process. Even though all mothers in this sample were experienced breastfeeding mothers, they noted numerous concerns and asked many questions about the breastfeeding process. Several subjects compared the new infant's breastfeeding behavior with their previous child and noted differences. Various anxieties included waking the baby and keeping the infant actively sucking at the breast long enough to obtain sufficient milk or colostrum, difficulty with latch-on, excessive weight loss in the infant, engorgement, positioning the infant, coping with a clogged milk duct, waking an excessively sleepy baby, late onset of milk production at postpartum day five, questions about how the milk looked and questions about facilitating the let-down reflex.

By the third postpartum week the women were less anxious and comments were more favorable as breastfeeding became more comfortable for the mother and infant. One infant was slow to gain weight; his mother had to cope with excessive engorgement when the infant was taken off of breastfeeding for twenty-four hours to encourage his bilirubin to decrease. One infant preferred one breast over the other; his mother commented on how difficult it was to get him to latch on the less desired side. A subject was focusing on encouraging her infant to change her sleep schedule in order to nurse more frequently in the daytime instead of staying up all night. Three mothers commented that their infants had gotten more efficient at breastfeeding and were more predictable in their schedules by the third week after birth. One mother stopped breastfeeding at one week postpartum because of a severe breast infection; another mother combined bottle and breastfeeding from postpartum day four because she was convinced she was not producing enough milk.

Mothers commented that they had questions about breastfeeding and sought answers from the Family Advocacy Nurse, breastfeeding books and health providers. The

breastfeeding anxieties and difficulties highlight the importance of treating each breastfeeding event as new and different for each mother. Even though these breastfeeding mothers had prior experience, numerous issues and anxieties came up in the early weeks after childbirth because of the personality or temperament of the new infant or simply the fact that the mother was now parenting two children. Health professionals need to be available to provide support and guidance.

Summary

The analysis of responses to the postpartum interview questions revealed that the sample of eight subjects demonstrated numerous physical and emotional concerns during the first three weeks postpartum. The concerns ranged from potentially life threatening (the infant who turned blue and the mother could not clear the airway) to conditions causing considerable morbidity in the mother including a painful breast infection, severe anxiety and difficulty sleeping, and a uterine prolapse. The mothers identified numerous circumstances related to the infant's condition that caused concern. The responses to the focus interview questions indicated that women are accomplishing the four tasks identified by Gruis (1977) in the postpartum period. These subjects provided information describing their physical restoration, details about caring for and establishing a relationship with the new infant and observations about alterations in their lifestyle and relationships since the arrival of the new infant. The postpartum literature identifies multiparas as having unique concerns related to the postpartum period. This statement was demonstrated by the fact that all subjects verbalized concern about the postpartum adjustment of the older sibling. All eight subjects identified a major component of the postpartum period as adjusting to the changes in their lifestyle and relationships. Women described their fatigue level and how they were adjusting and adapting to the changes in their normal sleep patterns. Although the women knew how to care for an infant, they verbalized numerous concerns about infant care including handling constipation, recognizing digestive disorders, caring

for a jaundiced baby, waking the infant at night, a delayed onset of milk production, umbilical cord drying problems, an infant's choking episode. These concerns have the potential to affect a woman's ability to cope with the numerous physical and emotional changes occurring in the postpartum period. All seven mothers who were breastfeeding made numerous comments about this process. Some women experienced anxiety and concern about their success with breastfeeding. The women displayed excellent coping skills and adaptability in handling the numerous concerns evident during this period. The results will be discussed further in the next chapter.

Conclusion

The purpose of this pilot study was to explore the postpartum needs and concerns of a group of multiparas in the first three weeks after childbirth. There exists a shortage of literature on the postpartum experiences of a group of military beneficiaries during the early weeks after childbirth. This section will present a summary of the major findings and their meaning, the implications for nursing, the strengths and limitations of the study and suggestions for future research.

Discussion

Womens' Postpartum Concerns and Needs

As summarized in Table 2, the group of eight postpartum women and their infants experienced numerous physical concerns in the first three weeks postpartum. The investigator was surprised at the large number of physical and emotional concerns that manifested in this group of eight healthy, low-risk, educated, middle and upper middle class women. Seven of the eight subjects described a superb support system in the early postpartum weeks. The study results support Mercer and Ferketich (1990) and Ruchala and Halstead (1994) who characterize the postpartum period as a time of adaptation and adjustment. The subjects with severe anxiety, interpersonal family conflict and difficulty sleeping could identify this period as a time of crisis in their family. Despite the physical

and emotional concerns, the investigator was impressed by how well the women were coping and using creative problem solving to manage the changes in their family unit and personal lives. The investigator doubted if a single, poor, uneducated woman with several children and no or minimal support system would have coped as well.

The results of this pilot study are similar to those of Norr, Nacion and Abramson (1989). Although their sample population was low-income mothers and infants, they noted substantial morbidity in the first two weeks of life. They recommended a shorter hospital stay with more health monitoring after discharge. This investigator concurs with Gennaro's (1995) observation that we may not have a true picture of the prevalence of health problems in the postpartum period by examining only postpartal acute care visits and rehospitalizations.

Necessity for Professional Support in the Postpartum Period

The subjects in this pilot project had medical care readily available during the postpartum period as a component of their military medical benefits. The women utilized numerous clinics and providers in the first three weeks after childbirth. Two women visited the Emergency Department for physical complications in the woman ($n=1$) or the infant ($n=1$). Medical care included treatment of a severe breast infection in one woman during the first week postpartum, assessments by military providers for evaluation of sleep problems and anxiety ($n=1$) and pediatric assessment for hyperbilirubinemia ($n=3$) with one infant receiving five bilirubin levels checks. The Family Advocacy Nurse visited one subject twice to evaluate her progress after discharge; in addition she phoned a subject to check on her status. A third subject had requested a visit by the Family Advocacy Nurse but was never contacted during the postpartum period. A nurse from the obstetrical unit called one subject to ask about her postpartum course and answer questions.

Traditional postpartum care for childbearing women include a visit at four to six weeks postpartum for the mother and a check of the infant during the first week of life and

at specified intervals. The investigator hypothesizes that women who do not have insurance or military medical care may be less likely to access medical care except in emergencies due to the increased cost and difficulty in finding a provider. Gennaro (1995) noted that research has shown that women with caretaking responsibilities often place the health needs of their children first; they typically wait until their problems are severe and don't access health care in a timely fashion. This group of subjects had a mean length of postpartum hospitalization at 33.5 hours with a range of 24-42 hours. The investigator wondered if a high-risk woman with a minimal support system hospitalized less than 24 hours may experience more complications that medical providers do not see because of our minimal contact with the woman during the four to six weeks after childbirth. Are we able to identify the woman with severe anxiety who may need additional follow-up or support in order to positively cope with the changes inherent in this period?

Several subjects verbalized their desire for further contact with health professionals during the early postpartum weeks. One subject would have liked a LaMaze reunion or follow-up class after birth to give mothers the opportunity to discuss breastfeeding concerns. She wanted more information on stress management and time management issues. Another subject wanted someone to call her weekly for the first month postpartum so she could talk about her postpartum concerns and ask questions. She also mentioned that a twenty-four hour hotline would have been appreciated.

Necessity for Information on Sibling Adjustment Issues

All subjects in this pilot study were concerned about how their older sibling would adjust to the new infant. Although the women were concerned about this issue, they did not seem to know where to obtain information about helping the older child adapt. A mother commented, "dealing with the older child and that to me is a real key point and not mentioned at all by hospital personnel." Another mother stated, "how to help the older sibling adjust to mom not being available. That is new and what you need to know." One

couple sought information from parenting journals such as *"American Baby"*. A formal sibling class was used by one mother in preparing her child to be a big sister. Families used their own instincts and information provided by friends and family to prepare the sibling. Strategies included activities such as reading books, renting videos and engaging in play to model appropriate touching, feeding etc.

The topic of sibling adjustment seems to be a missing element of traditional postpartum teaching, perhaps because nurses feel overwhelmed with the task of imparting basic information in a short period of time. As evidenced by the comments of the eight mothers in the pilot study, this topic is a major area of concern for multiparas expecting the birth of a second child. One strategy to remedy this omission could include sibling preparation information given as a handout to the parents sometime during the prenatal period. Parents could be encouraged to pursue the resources on their own. Postpartum education should include basic age-related information on the type of behavior the parents might see in the older sibling when they bring the baby home. Crucial information should focus on the topic of promoting safety for the infant. Six of the families in this study had older siblings under the age of three. One toddler stuck Q-tips in the babys' ears within two days of arriving home from the hospital. Fortunately, the infant was not injured. Families need help to anticipate behavior they may observe in the toddler and ways to keep the infant safe. An interesting finding in this study was that three of the toddlers were very ill the first week after the baby came home from the hospital; these children were up all night and demanded much extra attention and caring from the parents. Children of this age typically experience a large number of colds and upper respiratory infections; perhaps these toddlers' illness reflect the increased stress experienced by all family members when a new baby arrives on the scene.

Maloni (1994) concluded that adult learning theory tells us that a person is most motivated to learn when the information is immediately applicable to their life situation.

This issue is relevant to sibling preparation in pregnancy; although moms were concerned about sibling adjustment most did not address this issue in any significant way during the pregnancy. Numerous childbirth educators have commented that it is very difficult to get first-time parents to focus on any aspect of child care and parenting before the birth. First time parents are consumed with anxiety about the impending delivery and focus their attention exclusively on the birth process. They are ready to learn child care and parenting skills after the birth when they begin to assume responsibility for the infant. The same phenomenon may be related to sibling adjustment and parenting two children; although parents are anxious about this topic, they are unable to focus on the issues related to parenting two children until confronted by the reality after discharge from the hospital. Additional work on the most effective way to provide postpartum education needs to be an ongoing component of maternity care.

Implications for Practice

Obstetrical Nurses as Discharge Planners

The results of this pilot study support the view that the postpartum period encompasses many physical and emotional concerns for the postpartum woman and her family. Although it is obvious that the obstetrical nurse experiences numerous time pressures inherent in early discharge, the investigator feels it is crucial that all nurses evaluate families for their coping ability, support system and readiness for discharge. Nurses have an obligation to assess the family support system and identify strengths and weaknesses. Hampson (1989) determined that postpartum nurses have a particular responsibility to make an accurate assessment of a family's need for follow-up and to respond appropriately. According to Hampson, postpartum nurses should hone their assessment strategies and assessment should be a priority of care for postpartum women. The military population is likely to be living in a new geographic area and be separated from their family of origin. To provide maximum support, the obstetrical nurse should

have basic knowledge of military and community support services. Some families may need information on obtaining household help in the early weeks postpartum. A vital aspect of care is the ability to match the particular needs of families with appropriate resources.

The employed mother may need assistance in mobilizing an appropriate support system prior to the birth. Gjerdingen, Froberg, and Fontaine (1991) suggest that nurses address such issues as available, high-quality day care, parental leave for both parents, and workplace support such as flexible hours, the opportunity to breastfeed, on-site day care and care for sick children. Again the issues become how to incorporate this amount of education into a packed agenda of antepartum and postpartum information. Perhaps these topics could be covered by handouts given during the prenatal period. The mother could be encouraged to organize her support system prior to the birth.

The investigator suggests that the obstetrical nurse is providing limited care if she concentrates only on teaching traditional postpartum information. The nurse needs to focus on the long-term needs of families instead of considering their needs for a short one or two day hospital stay. A family may have no clue as to available support services or how to access them; the nurse's intervention in this area may enhance a family's ability to cope in the early postpartum weeks. Ideally discharge planning is a multidisciplinary action. According to Williams (1991), the components of discharge planning include patient and family teaching, coordination of informal support and formal referral to community agencies. The patient is at the center of the process and the planning is based on a needs assessment where health care professionals, patients and families collaborate to ensure continuity of care after discharge from the hospital. The investigator recommends that all nurses become familiar with the basic functions of a discharge planning nurse. Many postpartum nurses already function informally in this role; the investigator suggests a formal incorporation of this role into existing job descriptions. In these days of hospital

downsizing, the nurse's role in discharge planning in the obstetrical area needs to be formalized and valued.

Provision of Postpartum Teaching

Although the women in this sample were generally very satisfied with the teaching they received, they identified areas where the teaching could be modified. Two multiparas commented that they were already familiar with baby care; some of the information offered seemed redundant to them. Two subjects commented that the teaching was conducted through the use of handouts; one mother found the material helpful and one found herself too fatigued to focus on the content. Martell, Imle, Horwitz and Wheeler (1989) described the difficulties of teaching mothers in a short-stay program because of the cumulative effects of sensory overload, postdelivery fatigue and sleep deprivation. A mother echoed these authors' findings by reporting that she was not really mentally there during the teaching and it felt like a crash course with too much, too fast. One subject suggested that the information be geared more to what the mother needs. Jordan (1989) concurred with this mother's observation by noting that parents are not interested in receiving the large amount of information provided by nurses in the postpartum period. She recommended that nurses reconsider our care in the postpartum period and pay particular attention to the educational component of care. Maloni (1994) concluded that maternal learning needs vary with time, parity and socioeconomic status.

This investigator suggests that postpartum units initiate the use of a learning needs assessment to ascertain the mother's learning needs. Davis, Brucker and MacMullen (1988) concluded that mothers were capable of delineating their learning needs in the early postpartum period. A needs assessment tool follows the principles of adult learning whereby information the mother is most interested in learning is immediately provided. Numerous authors have commented on the difficulty of imparting appropriate information during the shortened teaching opportunities available in a typical early-discharge unit. By

incorporating a learning needs assessment, teaching opportunities would be focused on material the mother requests and would be more likely to meet her needs. Several authors have described various tools available for evaluating learning needs in the woman. Gillerman and Beckham (1991) describe the use of a learning needs assessment tool that identifies topics of particular interest/concern to the patient and an evaluation of her preferred learning style. The patient completes this tool on admission to the labor and delivery area. The nurse can then individualize a teaching plan based on the identified learning needs and establish specific teaching/learning goals with the patient. Gillerman and Beckham's unit implemented a Mother-Baby Carepath. According to these authors, the Carepath is "a means to streamline, clarify and standardize the repetitive aspects of postpartum nursing care" (p. 12). Sheil, Bull, Moxon, Muehl, Kroening, Peterson-Palmberg and Kelber (1995) used a maternal concerns questionnaire as a tool for assessing the needs and concerns of new mothers accurately and quickly. They noted that the tool discriminated between concerns of populations. These authors suggested initiating the tool late in pregnancy so an individualized teaching plan targeting major concerns could be addressed before childbirth. The tool could be reviewed again at the time of a postpartum home visit to see if concerns are being handled or reduced. Davis, Brucker and Macmullen (1988) detailed the use of a questionnaire consisting of various maternal and infant care teaching topics. Hiser (1987, 1991) and Moss (1981) used a card-sort tool to identify concerns of new mothers. Martell et al. (1989) also recommended the Q sort instrument which was similar to the card-sort tool used by Hiser and Moss. The Q sort was a tool to help assess individual learning needs of women. All women should hear information on signs and symptoms that indicate the need for evaluation in the woman or infant, where to obtain maternal or infant care and identification of sources of available transportation to a health care facility. Tulman and Fawcett (1991) stress the necessity for women to receive more information about lifestyle adjustments after childbirth. Gardner

and Campbell (1991) recommended that the nurse initiate a discussion with the mother on how to decrease her physical fatigue and conserve energy. This discussion should include identification of sources of social support, child care and help with housework. Gardner and Campbell particularly stress the need for anticipatory guidance on fatigue prevention for the family with few social supports. DiMatteo, Kahn and Berry (1993) emphasize the need for the provision of anticipatory guidance about the postpartum period prior to birth. Some postpartum units have incorporated necessary education through the use of handouts that stress the crucial information and are easy for the postpartum mother with her "fog of fatigue" to read and comprehend. Hiser (1991) suggested that information needs to be given in a variety of forms for the most effective use by the parents.

Initiation of New Care Models for the Postpartum Period

Ruchala and Halstead (1994) asserted that we should be assessing our current models of maternity care for adequacy in meeting the needs of low-risk mothers. New delivery services could be set up to help a family during this period of adaptation. Evans (1995) concluded that the need for postpartum home care is increasing. According to Evans, "in current health care reform efforts, postpartum follow-up care must be included as a basic maternity benefit" (p. 162). She described a variety of options for providing follow-up care including telephone follow-up, home visits, information lines, lactation consultation, mother-infant outpatient clinics and support groups.

Moss (1981), Harrison (1990), and Duckett, Henly and Garvis (1993) recommended a postpartum home visit as an integral part of postpartum care for mothers. Harrison (1990) advocated a home visit at 48-72 hours post discharge and noted that low-income mothers may need two home visits during the first two weeks after delivery. Ament (1990) concluded that the mother may be more ready to learn information relevant to the postpartum period at 24-48 hours after the delivery. The investigator concurs with this recommendation and supports a home visit as an efficient way to provide postpartum

education and address various concerns and needs of the woman in the early weeks after childbirth. This visit seems more essential in light of the shortened hospital stays currently available for mothers.

According to Gennaro (1995), the first year after delivery is a time when mothers experience many acute care problems. She noted that the immune system is typically depressed after childbirth; unhealthy lifestyle choices and sleep deprivation may play a role in the change in function of the immune system. Gennaro suggested the current managed care environment provides an opportunity for the nurse to focus more on wellness and client health because reimbursement is tied to health outcomes. The postpartum woman is very motivated to optimize her health. According to Gennaro, the postpartum period is an optimal time for the nurse to provide health screening and education regarding healthy lifestyle choices. Gennaro believes the postpartum period is an ideal time to encourage a woman to change unhealthy habits and focus on improving eating habits, increasing exercise and losing excessive weight. According to Gennaro, few programs in the country use the postpartal woman's interest in changing risky health behaviors to expand the focus of postpartum care.

As previously described, several subjects in this study experienced physical problems in the first three weeks after childbirth. A facility delivering forty or more infants per month could predict numerous problems experienced by mothers and infants in the early weeks after childbirth. A more feasible program of care may be the inclusion of a nurse run postpartum clinic as described by Keppler (1995). This author initiated an innovative, low-cost postpartum follow-up program in 1991 which provided early postpartum care to mothers, infants and their families for one third the cost of a home visit. An additional benefit is that the program assured easy access for new mothers.

Moss (1981) recommended that newer approaches for postpartum support should include support groups focusing on the problems of multiparas. Smith (1989) also

concluded that multiparas could benefit from support groups where topics of discussion included organizational techniques and time management skills.

Ruchala and Halstead (1994) recommended nurse-initiated follow-up telephone calls as a means for mothers to voice their concerns and obtain support and guidance during the postpartum period. Hampson (1989) concluded that group support and telephone follow-up are feasible options for women experiencing typical care. "A follow-up call may help the mother in crisis who is not always able to mobilize herself to call for assistance" (Hampson, 1989). Maloni (1994) recommended helping the mother identify other available sources of knowledge so the mom can continue to learn about the infant after discharge.

Limitations of the Study

Sample

Limitations for this study include:

1. Convenience sampling provides little opportunity to control for biases.
2. The small sample size is not an adequate representation of the population of postpartum multiparas.
3. The study includes only white, married, highly educated middle and upper-middle class women so is not generalizable to the population at large.

Descriptive research studies are not meant for generalization to the population (Burns & Grove, 1993). Due to a convenience sampling of military beneficiaries delivering at only one military facility, the results may be biased and represent only a small segment of the population of women delivering at military medical facilities all over the world. The sample size of eight women was very small and may not have represented a typical population of multiparas delivering a second child. The study sample included only white, married, highly educated middle and upper-middle class women; the homogeneous population is not typical of groups of multiparas in the population at large. The

investigator was not able to recruit any mothers of third or subsequent children in the sample population; these mothers might demonstrate different concerns and needs than mothers of second children. Despite these limitations in sampling, this pilot study has given some insight into the concerns and needs of a group of women in the first three weeks after delivery of a second child.

Data Collection

The investigator used a telephone survey design with open-ended questions focused on obtaining information related to the woman's lived postpartum experience, her support system, concerns and needs after the birth, postpartum teaching in the hospital, sibling adjustment and preparation, feelings about early discharge, and problems or complications encountered in the first three weeks after birth. Telephone surveys include a woman's self-report of her experiences; bias may be introduced if the woman told the investigator what she thought the investigator wanted to hear or modified her actual experience in any way. Variations in the interpretation of the data are possible as the investigator interprets the responses to the open-ended questions. In an attempt to maintain the validity and reliability of the questionnaire, the researcher continued to ask each question in the same fashion with each subject and was careful in reporting all responses exactly as given by the subjects.

The investigator noted that some of the questions on the telephone survey needed refinement particularly the questions asking whether the mother obtained information about what it is like to parent two or more children before the birth and how and where she obtained this information. The investigator received vague responses to these questions and most replies described the parents' strategies for preparing the older sibling to be a big brother or a big sister.

Conclusion

This study focused on the postpartum concerns and needs of multiparas in the first three weeks after childbirth. The subjects consisted of a group of eight white, married, educated, middle and upper middle class women who had delivered second children at a local military facility. Seven of the eight women had superb support systems in the early weeks after childbirth. These women experienced numerous physical and emotional adjustments in the early weeks as they adapted to life with two children and recovered from the demands of childbirth. The results of this study strengthen the assumption that the postpartum period is a time of major transition in the life of a family.

The issue of concern is how can we provide the highest quality of care to postpartum women. At this point we do not know what type of care is most cost effective. In the more than 20 years that this investigator has provided obstetrical care, she has not seen postpartum care change in any appreciable way from the traditional care described by various authors in the 1970's. The addition of the Family Advocacy Program provided to military beneficiaries is certainly a positive step; however, the program needs to be expanded so that all families are able to access the services. Postpartum care for all families should include the assessment of the health of mothers and infants, the provision of necessary interventions and/or providing referrals for the family. Hampson (1989) maintains that nursing is one of the disciplines best prepared to help new parents through their first childbearing year. After completing this research project, the author is convinced that our focus of nursing care needs to be broadened in order to provide truly family centered care and meet the needs of a vulnerable population in the early weeks and months after childbirth.

References

- Abriola, D. V. (1990). Mothers' perceptions of a postpartum support group. Maternal-Child Nursing Journal, 29, 113-134.
- Affonso, D. D., Mayberry, L. J., & Sheptak, S. (1988). Multiparity and stressful events. Journal of Perinatology, 8 (4), 312-317.
- Affonso, D., & Mayberry, L. (1990). Common stressors reported by a group of childbearing american women. Health Care for Women International, 11, 331-345.
- Ament, L. (1990). Maternal tasks of the puerperium reidentified. Journal of Obstetric, Gynecologic and Neonatal Nursing (JOGNN), 19, 330-335.
- Beer, S. L. (1994). Tuning in to the emotional needs of the client who is already "somebody's mom". International Journal of Childbirth Education, 9 (2), 37-8.
- Berryman, G. K., & Rhodes, M. K. (1991). Early discharge of mothers and infants following vaginal childbirth. Military Medicine, 156 (11), 583-584.
- Burns, M., & Grove, S. (1993). The practice of nursing research (2nd ed.). Philadelphia: W. B. Saunders Company.
- Cunningham, F. G., MacDonald, P. C., Gant, N. F., Leveno, K. J., and Gilstrap, L. C. (1993). Williams obstetrics. (19th ed.) Connecticut: Appleton & Lange, p. 249.
- Davis, J. H., Brucker, M. C., and Macmullen, N. J. (1988). A study of mothers' postpartum teaching priorities. Maternal-Child Nursing Journal, 17, 41-50.
- DiMatteo, M. R., Kahn, K. L., & Berry, S. H. (1993). Narratives of birth and the postpartum: analysis of the focus group responses of new mothers. Birth: Issues in Perinatal Care & Education, 20 (4), 204-211.
- Duckett, L., Henly, S. J., and Garvis, M. (1993). Predicting breast-feeding duration during the postpartum hospitalization. Western Journal of Nursing Research, 15 (2), 177-198.
- Evans, C. J. (1995). Postpartum home care in the United States. Journal of Obstetric, Gynecologic and Neonatal Nursing, 24, 180-186.
- Gardner, D. L., & Campbell, B. (1991). Assessing postpartum fatigue. MCN: American Journal of Maternal Child Nursing, 16 (5), 264-266.

Gennaro, S. (1995). Public policy and the health of postpartal women in the United States. Capsules and Comments in Perinatal and Women's Health Nursing, 1 (2), 86-90.

Gillerman, H., and Beckham, M. H. (1991). The postpartum early discharge dilemma: an innovative solution. Journal of Perinatal and Neonatal Nursing, 5 (1), 9-17.

Gjerdingen, D. K., Froberg, D. G., & Fontaine, P. (1990). A causal model describing the relationship of women's postpartum health to social support, length of leave, and complications of childbirth. Women & Health, 16 (2), 71-87.

Gjerdingen, D., Froberg, D., & Fontaine, P. (1991). The effects of social support on women's health during pregnancy, labor and delivery, and the postpartum period. Family Medicine, 23, 370-375.

Gjerdingen, D. K., & Chaloner, K. (1994). Mothers' experience with household roles and social support during the first postpartum year. Women & Health, 21 (4), 57-74.

Gottlieb, L. N., & Mendelson, M. J. (1995). Mothers' moods and social support when a second child is born. Maternal-Child Nursing Journal, 23 (1), 3-14.

Grace, J. T. (1993). Mother's self-reports of parenthood across the first 6 months postpartum. Research in Nursing & Health, 16 (6), 431-439.

Gruis, M. (1977). Beyond maternity: postpartum concerns of mothers. MCN: The American Journal of Maternal Child Nursing, May/June, 182-188.

Hampson, S. J. (1989). Nursing interventions for the first three postpartum months. JOGNN-Journal of Obstetric, Gynecologic and Neonatal Nursing, 18 (2), 116-122.

Harrison, L. (1990). Patient education in early postpartum discharge programs. MCN, 15 (1), 32-36.

Hiser, P. (1987). Concerns of multiparas during the second postpartum week. JOGNN, 16, 195-203.

Hiser, P. L. (1991). Maternal concerns during the early postpartum. Journal of the American Academy of Nurse Practitioners, 3 (4), 166-173.

- Jordan, P. (1989). Support behaviors identified as supportful and desired by second-time parents over the perinatal period. Maternal Child Nursing Journal, 18, 133-145.
- Keppler, A. B. (1995). Postpartum care center: follow-up care in a hospital-based clinic. Journal of Obstetric, Gynecologic and Neonatal Nursing, 24, 17-21.
- Maloni, J. A. (1994). The content and sources of maternal knowledge about the infant. Maternal-Child Nursing Journal, 22 (4), 111-120.
- Martell, L. K., Imle, M., Horwitz, S., and Wheeler, L. (1989). Information priorities of new mothers in a short-stay program. Western Journal of Nursing Research, 11 (3), 320-327.
- Massey, V. H. (1995). Nursing research. (2nd ed.) Pennsylvania: Springhouse Corporation.
- Mercer, R. (1979). "She's a multip. . . she knows the ropes". MCN, 4, 301-304.
- Mercer, R. T., & Ferketick, S. L. (1990). Predictors of family functioning eight months following birth. Nursing Research, 39 (2), 76-82.
- Moss, J. (1981). Concerns of multiparas on the third postpartum day. JOGNN, Journal of Obstetric, Gynecologic and Neonatal Nursing, 10 (6), 421-424.
- Norr, K., Nacion, K., and Abramson, R. (1989). Early discharge with home followup: impact on low-income mothers and infants. JOGNN, Journal of Obstetric, Gynecologic and Neonatal Nursing, 18, 133-141.
- Polit, D., & Hungler, B. (1991). Nursing research: Principles and methods (4th ed.). Philadelphia: J. B. Lippincott Company.
- Pugh, L. C., & Milligan, R. M. (1993). A framework for the study of childbearing fatigue. Advances in Nursing Science, 15 (4), 60-70.
- Rhode, M. A., & Groenjes-Finke, J. M. (1980). Evaluation of nurse-initiated telephone calls to postpartum women. Health Care of Women, 2 (2), 23-41.
- Rhodes, M. K. (1994). Early discharge of mothers and infants following vaginal childbirth at the United States Air Force Academy: a three-year study. Military Medicine, 159 (3), 227-230.

Ruchala, P. L., & Halstead, L. (1994). The postpartum experience of low-risk women: a time of adjustment and change. Maternal Child Nursing Journal, 22 (3), 83-9.

Sheil, E. P., Bull, M. J., Moxon, B. E., Muehl, P. A., Kroening, K. L., Peterson-Palmberg, G., and Kelber, S. (1995). Concerns of childbearing women: a maternal concerns questionnaire as an assessment tool. JOGNN-Journal of Obstetric, Gynecologic, and Neonatal Nursing, 24 (2), 149-155.

Smith, M. P. (1989). Postnatal concerns of mothers: an update. Midwifery, 5 (4), 182-188.

Stein, J. (Ed). (1975). The random house college dictionary. New York: Random House, p. 278, 890.

Tanner, C. A., & Lindeman, C. A. (1989). Using nursing research. National League for Nursing Publication.

Tulman, L., & Fawcett, J. (1991). Recovery from childbirth: looking back 6 months after delivery. Health Care for Women International, 12, 341-350.

Williams, S. (1991). Discharge planning: whose role? The Australian Nurses Journal, 21 (5), 20-22.

APPENDIX

GENERAL INFORMATION QUESTIONNAIRE

Your name:-----

Address:-----

City-----
ZipYour telephone ()----- ()-----
Home Work

Your Age:----- Your Husband/Partner's Age:-----

Your Current Marital Status: (1) Single----- (2) Married-----
(3) Separated----- (4) Divorced----- (5) Living together-----Your Race/Ethnic Group: (1) White----- (2) African-American-----
(3) Hispanic----- (4) Japanese----- (5) Chinese-----
(6) Filipino----- (7) Korean----- (8) Other-----How many years of schooling have you had?-----
State last grade/degree completed

Are you an active duty service member?-----

Your occupation:-----

Are you returning to work full time?-----part time?-----

How old will your baby be when you return to work?-----

Your husband/partner's occupation:-----

Your total family income per year:

-----Below \$5,000 (1)	-----\$40,000-49,999 (6)
-----\$5,000-9,999 (2)	-----\$50,000-59,999 (7)
-----\$10,000-19,999 (3)	-----\$60,000-64,999 (8)
-----\$20,000-29,999 (4)	-----\$65,000 & Above (9)
-----\$30,000-39,999 (5)	

Living arrangements:-----

G: ----- P:-----

Age(s) of other children in the family:-----

Date and time of birth:-----

Date and time of hospital discharge:-----

What is the sex of your baby? -----Boy (1) -----Girl (2)

How much did your baby weigh at birth? -----Pounds-----Ounces

From the time you first noticed regular contractions, how long was your labor?

Birth complications?-----

Type of feeding:-----

Prior experience with breastfeeding? -----

TELEPHONE INTERVIEW #1

1. Describe your life since you brought the baby home from the hospital.
 2. What do you do to cope with these changes?
 3. What kind of support have you had since the birth?
 4. Who is helping you now?
 5. How would you rate the level of support you received on a scale of from 0-10? How would you change the level of support?
 6. How did you feel about taking the new baby home after the birth?
 7. What have you been concerned about since you've been home with the baby?
 8. Did you receive any teaching related to caring for yourself and your infant during your hospitalization?
 9. How would you describe the teaching you received?
 10. Were you satisfied with the teaching you received?
 11. What other information do you think should be included for mothers of second or subsequent children to prepare you for life with more than one child?
 12. Did you obtain information about what it is like to parent two or more children before the birth?
 13. How did you obtain this information?
 14. Where did you obtain this information?
 15. How do you feel about early discharge after childbirth?
 16. Have you or your baby encountered any problems or complications since you've been home from the hospital? What? Did you seek care for this problem and was it resolved?
- Do you have any other comments?

TELEPHONE INTERVIEW # 2

1. Can you tell me what your life with the new baby has been like since we last talked?
2. What are you doing to cope with the changes in your life?
3. What kind of support are you receiving to cope with these changes?
4. On a scale from 0-10 how would you rate the level of support?
5. Would you have liked more support from health professionals since the birth?
6. What have you been concerned about since you've been home with the baby?
7. How is your older child coping with the adjustment to the new baby? What behavior have you noted? What are you doing to help the child cope?
8. Looking back, do you feel your hospital stay was long enough after the birth?
9. Have you or your baby encountered any problems or complications since you've been home from the hospital? How was the problem resolved?

Any other comments?

APPENDIX D

CONSENT FORMS

64

Consent for Approval

Adrian A. Rosenberg, MD

Victor Spitzer, PhD

Chairpersons, COMIRB

Date

COLORADO MULTIPLE INSTITUTIONAL REVIEW BOARD

SUBJECT CONSENT

Project Title: Postpartum Telephone Interviews of Multiparas Date: 27 November 1995
Discharged 24-48 Hours After Childbirth

Project Description

You are being asked to take part in a study of the postpartum concerns and needs of multiparas (mothers of two or more children) who have experienced discharge from the hospital 24-48 hours after delivery. The purpose of this study is to identify the variety of concerns and needs mothers experience during the first three weeks after the birth of a second or subsequent child. You are being asked to participate in this study because you are a healthy mother who has just given birth to a second or subsequent child and anticipate discharge from the obstetrical unit within 24-48 hours after delivery. This study may improve understanding of postdelivery education, support services and nursing care desired by new mothers.

Procedures Involved

If you agree to participate in the study, the following will occur:

1. You will complete a Demographics Form which asks general information about you and your family. Completing the questionnaire will take approximately 10-15 minutes and will be accomplished at the time the researcher asks you to participate in the study.
2. The researcher will set up an appointment for a telephone interview with you on the fifth to the seventh postpartum day at a date and time of your preference. The interview will consist of a series of open-ended questions asking about your needs and concerns since discharge from the hospital. You will have the opportunity to talk about questions or concerns about yourself, your baby or your family. The nurse's call will be in addition to the usual postdelivery care your baby and you would normally receive from the doctor or clinic.
3. The researcher will call you as specified in #2 for an interview lasting approximately 15-20 minutes as determined by your needs. At the conclusion of the interview, the researcher will set up an appointment for a second interview to occur on the 18th-21st day postpartum at a convenient time prearranged with you.

Initials-----

Page 1

4. The second interview will consist of the same questions as the first interview and should last approximately 15-20 minutes, again determined by your needs.
5. The charts of your baby and yourself will be reviewed by the investigator for details of your medical history and hospitalization for verification of your low-risk status and analysis of details related to childbirth and postdelivery experiences.

Discomforts, Risks, Benefits

There is no benefit for you for being in this study. You will have the opportunity to talk with an experienced obstetrical nurse during a time of adaptation and change in your family. If you agree to participate in this study and talk with the research nurse about your postpartum needs and concerns, you may find the talks tiring. Some topics might bring to the surface some emotional concerns you may find upsetting or would prefer not to talk about. If you become emotionally upset, you may ask for the interview to be stopped and emotional support and/or referral will be made as appropriate. You have the right not to answer any question asked by the nurse or contained in the Demographic Form and you may stop participating in the study at any time. In responding to the Demographic Form and interviews you may disclose confidential information; every effort will be made to protect your right to confidentiality as a result of your participation in this study. All Demographic Forms will be assigned an identification number by the researcher, therefore, your identifying information will be known only to the researcher. All identifying information will be maintained by the researcher in a locked cabinet. If any situation of child abuse is established, we are obligated to report to Family Advocacy Services, United States Air Force Academy, Colorado.

Source of Funding and Cost to Subject:

There will be no costs to you for participating in this study and you will not receive any payment for participation.

Study Withdrawal:

If you choose to withdraw from this study at any time, you will receive the usual postpartum medical and nursing care to which you are entitled. The investigator may terminate your participation in the study if you experience emotional or physical complications which make it impossible for you to complete the two telephone interviews or if the investigator deems it is in your best interests to withdraw from the study.

Invitation for Questions:

Please ask questions about any aspect of this research or this consent either now or in the future. You can direct your questions to Captain Janet Egan at (719) 488-3085.

Initials-----

Page 2

Confidentiality:

The investigator will treat your identity with professional standards of confidentiality. However, the U. S. Department of Health and Human Services has the right to inspect all of your medical records related to this research for the purpose of verifying data. The information obtained in this study may be published in medical journals, but your identity will not be revealed. If you have questions regarding your rights as a research subject, please call Desiree Fernandez, secretary of the COMIRB at (303) 270-7960.

Authorization:

I have read this paper about the study or it was read to me. I know what will happen, both the possible good and bad (benefits and risks). I choose to participate in this study; I know I can stop being in the study and I will still get the usual medical and nursing care. I will get a copy of this consent form (initial all pages of the consent form).

Signature: _____ Date: _____
subject print name

Consent form explained by:----- Date:-----
signature print name

Investigator:----- Date: -----

Initials-----

COLORADO MULTIPLE INSTITUTIONAL REVIEW BOARD

Office of the COMIRB

Participating Institutions

Room 1810C
Campus Box C-290
4200 East Ninth Avenue
Denver, Colorado 80262
(303)270-8081
FAX (303) 270-8540

The Children's Hospital
Colorado Prevention Center
Denver Health & Hospitals
University of Colorado Health Sciences Center
Department of Veterans Affairs Medical Center, Denver
University Hospital

TO: JANET LEE EGAN BOX C288 DATE: 12-27-95
FROM: COLORADO MULTIPLE INSTITUTIONAL REVIEW BOARD
YOUR APPLICATION ENTITLED: "POSTPARTUM TELEPHONE INTERVIEWS OF MULTIPARAS DISCHARGE
24-48 HOURS AFTER CHILDBIRTH"

COMIRB PROTOCOL NUMBER: 95-688

Has been unanimously approved by the COMIRB 12-21-95 which includes your protocol and consent form/revised consent form. The COMIRB will require a follow up on the status of this project within a 12 month period from the date of approval unless a restricted approval applies. If you have a restricted or high risk protocol, specific details will be spelled out with a special set of instructions. We shall send you a form to be completed to define the status of your project.

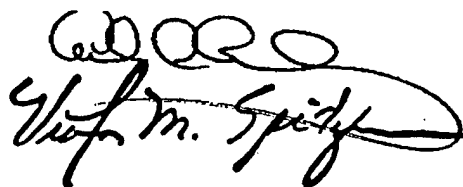
The investigator bears the responsibility for obtaining from all patients and subjects "Informed Consent" as approved by the COMIRB.

It is also your responsibility to inform the COMIRB immediately of any deaths, serious complications or other untoward effects of this research.

Please notify the COMIRB if you intend to change the experimental design in any way.

As of July 1, 1983, the COMIRB **REQUIRES** that the subject be given a copy of the consent form which includes the name and telephone number of the investigator.

Any questions about the COMIRB's action on this project should be referred to the Secretary Desiree Fernandez or Vicky Starbuck (270-8081 or UCHSC BOX C-290).



Adam Rosenberg, M.D.
Victor Spitzer, Ph.D.
Chairmen
Colorado Multiple Institutional Review Board

DEPARTMENT OF THE AIR FORCE

10th Medical Group
USAF Academy, Colorado

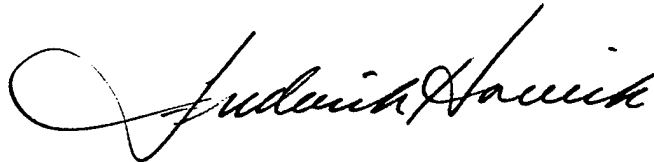
28 Dec 95

MEMORANDUM FOR Capt. JANET L. EGAN, USAF, NC
19485 Draco Drive
Monument, CO 80132

FROM: 10MDG/SGH

SUBJECT: Proposed Research Project

1. We see no problem allowing you to conduct your proposed research here at the Academy Hospital. However, our legal counsel addressed the issue of compliance with AFI 36-2601, a copy of which is enclosed. It is incumbent on you to comply with this AFI prior to starting your research.
2. Once you have shown compliance with this AFI, you are free to conduct your research survey as outlined in your protocol.



cy: Col Charles K. Maffet
Commander, 10MDG

FREDERICK HORNICK, Col, USAF, MC
Chief, Professional Services



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE PERSONNEL CENTER
RANDOLPH AIR FORCE BASE TEXAS

69

9 January 1996

AFMPC/DPSAS
550 C Street West, Ste 35
Randolph AFB TX 78150-4737

Janet L. Egan, Capt, USAF, NC
19485 Draco Drive
Monument, CO 80132

Dear Captain Egan

Survey research submitted for approval without official Air Force sponsorship is generally not approved. However, because you indicate you have the approval to conduct your study within the USAFA Hospital, we will approve your proposed study of 12 - 20 women. Participation by Air Force military personnel and/or dependents must be voluntary.

Recommend you also provide the USAFA Hospital a copy of your findings when your project is completed. A survey control number (SCN) of USAF SCN 96-07 is assigned and expires on 30 Apr 96. Questions regarding this action can be directed to me at DSN 487-5680 or (210) 652-5680.

A handwritten signature in black ink, appearing to read "Charles H. Hamilton", is positioned above the printed name.

CHARLES H. HAMILTON
Chief, Survey Branch

cc:
AFIT/XOX
USAFA/RRER